AltusMetrum

Release Notes for Version 1.1

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Version 1.1.1 is a bug-fix release. It fixes a couple of bugs in AltosUI and one firmware bug that affects TeleMetrum version 1.0 boards. Thanks to Bob Brown for help diagnosing the Google Earth file export issue, and for suggesting the addition of the Ground Distance value in the Descent tab.

1. AltOS

AltOS fixes:

- TeleMetrum v1.0 boards use the AT45DB081D flash memory part to store flight data, which is different from later TeleMetrum boards. The AltOS v1.1 driver for this chip couldn't erase memory, leaving it impossible to delete flight data or update configuration values. This bug doesn't affect newer TeleMetrum boards, and it doesn't affect the safety of rockets flying version 1.1 firmware.

2. AltosUI

AltosUI new features:

- The "Descent" tab displays the range to the rocket, which is a combination of the over-the-ground distance to the rockets current latitude/longitude and the height of the rocket. As such, it's useful for knowing how far away the rocket is, but difficult to use when estimating where the rocket might eventually land. A new "Ground Distance" field has been added which displays the distance to a spot right underneath the rocket.

AltosUI fixes:

- Creating a Google Earth file (KML) from on-board flight data (EEPROM) would generate an empty file. The code responsible for reading the EEPROM file wasn't ever setting the GPS valid bits, and so the KML export code thought there was no GPS data in the file.

- The "Landed" tab was displaying all values in metric units, even when AltosUI was configured to display imperial units. Somehow I just missed this tab when doing the units stuff.

- Sensor data wasn't being displayed for TeleMini flight computers in Monitor Idle mode, including things like battery voltage. The code that picked which kinds of data to fetch from the flight computer was missing a check for TeleMini when deciding whether to fetch the analog sensor data.